

Title (en)  
TEM SAMPLE PREPARATION

Title (de)  
TEM-PROBENVORBEREITUNG

Title (fr)  
PRÉPARATION D'ÉCHANTILLONS POUR MICROSCOPIE ÉLECTRONIQUE À TRANSMISSION

Publication  
**EP 2668488 B1 20160921 (EN)**

Application  
**EP 12738768 A 20120128**

Priority  
• US 201161437474 P 20110128  
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Abstract (en)  
[origin: WO2012103534A1] An improved method of preparing ultra-thin TEM samples that combines backside thinning with an additional cleaning step to remove surface defects on the FIB-facing substrate surface. This additional step results in the creation of a cleaned, uniform hardmask that controls the ultimate results of the sample thinning, and allows for reliable and robust preparation of samples having thicknesses down to the 10nm range.

IPC 8 full level  
**G01N 1/28** (2006.01); **H01J 37/20** (2006.01); **H01J 37/26** (2006.01); **H01J 37/305** (2006.01)

CPC (source: EP US)  
**G01N 1/286** (2013.01 - EP US); **H01J 37/261** (2013.01 - US); **H01J 37/3056** (2013.01 - EP US); **G01N 2001/2886** (2013.01 - EP US); **H01J 2237/31745** (2013.01 - EP US)

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2012103534 A1 20120802**; CN 103403520 A 20131120; CN 103403520 B 20151223; EP 2668488 A1 20131204; EP 2668488 A4 20150304; EP 2668488 B1 20160921; JP 2014505255 A 20140227; JP 5973466 B2 20160823; US 2014217283 A1 20140807; US 2015053548 A1 20150226; US 2016020069 A1 20160121; US 8859998 B2 20141014; US 9177760 B2 20151103; US 9378925 B2 20160628

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